A Dental Hygiene - Radiation Therapy Interprofessional Student Shadowing Session
Alexandra Sheppard RDH MEd¹, Minn Yoon PhD¹, Susan Cauti BEd MEd², Janelle Duquette BSc MRT(T)², Susan Fawcett MRT(T), BSc.(Hons), MA²
Dental Hygiene Program¹, Radiation Therapy Program²

Background

• Head and neck cancer (HNC) accounts for approximately 4% of all new cancer cases in Canada and 3% of all cancer deaths.
• While a moderate decrease in HNC has been documented, the incidence of oropharyngeal cancers related to human papillomavirus (HPV) is increasing and is predicted to surpass the prevalence rate of cervical cancer by 2020.
• Dental hygienists are educated to identify HNC risk factors and how to communicate these oral health risks to patients.
• Routine HNC screenings facilitate earlier detection and can improve survival rates.
• Radiation therapy is often used in the treatment of HNC resulting in acute and chronic side effects. As well as planning and delivering radiation treatments, radiation therapists play an important role in assessing side effects and educating patients and their families on management strategies. Educating patients to seek pre and post radiation treatment care is essential to mitigate oral complications.

STUDENT LEARNING OBJECTIVES:
This interprofessional student shadowing session was created for dental hygiene and radiation therapy students to better understand the patient’s cancer care experience, beyond the DH/RT point of practice. Each station had peer feedback forms, and students filled in pre-and post-session surveys, both in the pre-brief, and de-brief sessions.

By the end of the session, the students were able to:
• Identify and describe the unique roles and responsibilities of a dental hygienist and a radiation therapist in a patient’s oncological journey.
• Utilize clear and effective patient education skills in dental hygiene and radiation therapy, before, during and after treatment.
• Describe and differentiate the roles and scopes of practice of each member of this interprofessional student shadowing session in delivering care for this head and neck patient.

Pre-Brief

Students were each introduced to how the session was going to take place. They were then asked to complete a pre-session survey:
• In the patient’s cancer experience, where do you think the patient encounters the dental hygienist and radiation therapist in their point of practice?
• What is the scope of practice of a DH and an RT?
• What are the roles and responsibilities of both disciplines?
• How does each of the patient narrative and this shadowing experience inform your future practice?

STATION 1: At the dental hygiene appointment

Dental hygiene students:
• Demonstrate an extra and intra oral examination
• Explain the dental hygiene process of care if a suspicious condition is identified.
• Explain that the patient is assessed again in 14 days, and is referred to their physician or oral pathologist.

STATION 2: On the radiation therapy treatment bed

Radiation Therapy Students:
• Relate the radiation therapist’s role and responsibilities
• Demonstrate the treatment fields and doses involved in treatment, using lasers.
• Describe the process of fabricating a mask, and the treatment procedure which involves patient straightening and positioning.

STATION 3: Using the VERT platform (Virtual Environment of Radiotherapy Treatment)

Radiation Therapy Students:
• Demonstrate the fields, borders, doses, and scatter involved in treatment.
• Explain treatment process for a head and neck cancer patient such as Darryl.
• Discuss further questions related to the general radiation treatment of patients.

STATION 4: The Patient Narrative

Instructor provides narratives shared by actual patients to emphasize the relational and humanistic care required at all points of care in a patient’s cancer care experience.

De-Brief

Students participated in a debrief-style question and answer discussion. Each student was then asked to complete a post-session survey, that captured whether this student shadowing experience had shed new light on the patient journey, and the roles and responsibilities of each profession.

The Patient Experience

Future Impact from the DH and RT Student Perspective

Both DH and RT students indicated that they learned a significant amount about the patient experience during their cancer care trajectory, and learned more about the HNC patient’s inter-therapy care. According to feedback gathered from each station, students indicated that they liked learning about each others’ professional responsibilities to the patient, and in the future would like to engage further in challenging questions and discussions to deepen their learning. Students expressed they now feel better-equipped with more tools and resources, better-prepared to treat HNC patients, and finally, feeling more confidently able to provide patients and their families with more mindfully skillful, empathic, high-quality care.

Future IPE Sessions

In the future, we hope to engage in more IPE endeavours with students from these, and other programs, like nutrition and food science dietetics, speech pathology, and / or physiotherapy. We would also make some changes to each station to better accommodate deeper learning that fosters the development of critical thinking, problem-solving, and communication skills amongst all professionals and with patients and their families.